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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,547	03/11/2004	Evan E. Koslow	KXIN 100061000	7831

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EXAMINER	
KURTZ, BENJAMIN M	
ART UNIT	PAPER NUMBER
1723	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/799,547	KOSLOW, EVAN E.	
	Examiner	Art Unit	
	Benjamin Kurtz	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 recites the limitation of the filter housing including a filter cartridge; claim 1 already contains that limitation on lines 2 and 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5 and 7-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang US 5 294 335 in view of Cartigny et al. US 5 678 721. Regarding claims 1 and 11, Chiang teaches a filter housing comprising: a sump (3) enclosing a filter cartridge (2) within said filter housing, a head (11) having an inlet (112) and an outlet (113) in fluid communication with the filter cartridge, said head removably attached to said sump, a radial sealing means (117) for providing a liquid tight seal between said sump and said head, a pressure relief mechanism (115) for depressurizing said sump, and at least one clamp (32) for attaching said sump to said head (fig. 1). Chiang does not teach a clamp actuator including a linear cam in sliding mechanical communication

with the clamp. Cartigny teaches a housing comprising a sump (2), a head (1), at least one clamp (15a) for attaching said sump to said head, and a clamp actuator including a linear cam (20a) in sliding mechanical communication with said at least one clamp (fig. 7, 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the clamp of Cartigny because the locking-unlocking device provides a simple and reliable manner of certain and complete closing of the vessel (col. 2, lines 1-4).

Regarding claims 2 and 3, Chiang further teaches said means for providing a liquid tight seal between said sump and said head is attached to the head and comprises an o-ring (117) (fig. 1, 4, col. 3, lines 9-16).

Regarding claims 4 and 5, Cartigny further teaches said at least one clamp is driven with one or more springs (45) (fig. 7); and said at least one clamp is positioned in partial circumferential contact in a horizontal place around corresponding rims of said head and said sump (fig. 1).

Regarding claim 7, Cartigny further teaches said clamp actuator comprises a rotary cam (260) in conjunction with a linear cam (20a) the rotary cam comprising: a center slot fitted to a pin extending from a top surface of the head, a first and second linear track equidistant from the center slot and being parallel to one another, and tracking pins extending from the clamps top surface traveling within each linear track (fig. 8).

Regarding claims 8-10, Cartigny further teaches a safety mechanism (10) that is responsive to a pressure inside said filter housing (col. 3, lines 23-35); said safety

mechanism locks said clamp actuator to prevent opening said at least one clamp when said filter housing is pressurized (col. 4, lines 14-21); and means (10) for locking said at least one clamp in an closed position when the sump is attached to the head (col. 4, lines 14-21).

Regarding claim 12, Chiang further teaches the filter cartridge having one or more sealing means (126) with a stub end cap (21) wherein a filtered fluid flows through the stub end cap and out through the outlet of said head (fig. 5b).

Regarding claim 21, Cartigny further teaches a clamp actuator including a linear cam (58) having a push button end, a stub nose distal from the push button, and an angled portion such that linear cam translates motion of a first direction into motion in a second direction perpendicular to the first direction in order to actuate the clamp open or closed (fig. 2 and 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the clamp actuator of Cartigny because the actuator device provides a simple and reliable manner of certain and complete closing of the vessel (col. 2, lines 1-4).

Regarding claims 13 and 14, Chiang teaches a filter housing comprising: a sump (3) enclosing a filter cartridge (2), a head (11) removably attached to the sump the head having an inlet (112) and an outlet (113) in fluid communication with the filter cartridge, a radially sealing means comprising an o-ring (117) between the sump and the head, a pressure relief mechanism (115) that depressurizes the sump and at least two clamps (32) in peripheral arrangement for attaching said head and said sump said at least two clamps having a planar portion thereof (fig. 1). Chiang does not teach a linear cam in

mechanical communication with the clamps. Cartigny teaches two clamps (15a, 15b) in peripheral arrangement to attach the head and the sump the clamps having a planar portion, and a linear cam (58) in mechanical communication with the two clamps with the planar portion of the two clamps such that actuating the cam (58) moving in a first direction moves the two clamps in a second direction perpendicular to the first direction to open or close the clamp (fig. 2 and 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the clamp of Cartigny because the locking-unlocking device provides a simple and reliable manner of certain and complete closing of the vessel (col. 2, lines 1-4).

Regarding claims 15-17, Cartigny further teaches the two clamps are driven with a spring (45) (fig. 1); the housing includes a safety mechanism (10) responsive to a pressure inside the housing (col. 3, lines 23-35); and a safety mechanism locks the actuating mechanism to prevent opening the clamps when the housing is pressurized (col. 4, lines 13-29, claim 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the locking valve of Cartigny because the lock valve permits locking in position each of the clamps (col. 7, lines 14-21).

Regarding claim 22, Cartigny further teaches a clamp actuator including a linear cam (58) having a push button end, a stub nose distal from the push button, and an angled portion such that linear cam translates motion of a first direction into motion in a second direction perpendicular to the first direction in order to actuate the clamp open or closed (fig. 2 and 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the clamp actuator of Cartigny because the actuator

device provides a simple and reliable manner of certain and complete closing of the vessel (col. 2, lines 1-4).

Regarding claims 18 and 19, Chiang teaches a filter housing comprising: a sump (3) enclosing a filter cartridge (2), a head (11) removably attached to the sump the head having an inlet (112) and an outlet (113) in fluid communication with the filter cartridge, a radial sealing means comprising an o-ring (117) between the sump and the head, a pressure relief mechanism (10) that depressurizes the sump, at least two clamps (32) under a tension load in peripheral arrangement for attaching said head and said sump, said at least two clamps having a planar portion thereof (fig. 1). Chiang does not teach a clamp actuating mechanism with a linear cam in conjunction with a rotary cam. Cartigny teaches a housing with two clamps (15a, 15b) in peripheral arrangement to attach a head (1) and a sump (2) the clamps having a planar portion thereof (fig. 1) and a clamp actuator comprising a rotary cam (26) in conjunction with a linear cam (20a) the rotary cam comprising: a center slot fitted to a pin extending from a top surface of the head, a first and second linear track equidistant from the center slot and being parallel to one another, and tracking pins extending from the clamps top surface traveling within each linear track (fig. 8) wherein the linear motion of the linear cam is translated to rotational motion of the rotary cam to open the clamps. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the clamp of Cartigny because the locking-unlocking device provides a simple and reliable manner of certain and complete closing of the vessel (col. 2, lines 1-4).

Regarding claim 20, Chiang further teaches a safety mechanism (115) that is responsive to a pressure inside the filter housing (col. 2, lines 61-62).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Kurtz whose telephone number is 571-272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bk 12/28/06

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